

**Abstract of the Disclosure**

The invention pertains to N-type calcium channel isoforms containing exon 37a (Ca<sub>v</sub>2.2e[37a]), which are specifically expressed in nociceptive neurons, and nucleic acids relating thereto. Also included are methods for identifying antagonists of Ca<sub>v</sub>2.2e[37a]

5 subunit activity that act by inhibiting the expression or function of the subunit. The invention further relates to methods of using such nucleic acids, polypeptides, and inhibitor molecules in the treatment and/or diagnosis of disease, such as in methods for treating pain, particularly neuropathic pain.